



University of Kentucky
UKnowledge

International Grassland Congress Proceedings

21st International Grassland Congress / 8th
International Rangeland Congress

The Successional Dynamic Changing Process of Vegetation Steppe from Central Asia and Mongolian Pasture

Erdenejav Guriin Proffessor
Mongolian Academy of Sciences, Mongolia

Follow this and additional works at: <https://uknowledge.uky.edu/igc>



Part of the [Plant Sciences Commons](#), and the [Soil Science Commons](#)

This document is available at <https://uknowledge.uky.edu/igc/21/1-4/45>

The 21st International Grassland Congress / 8th International Rangeland Congress took place in Hohhot, China from June 29 through July 5, 2008.

Proceedings edited by Organizing Committee of 2008 IGC/IRC Conference

Published by Guangdong People's Publishing House

This Event is brought to you for free and open access by the Plant and Soil Sciences at UKnowledge. It has been accepted for inclusion in International Grassland Congress Proceedings by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

The successional dynamic changing process of vegetation steppe from Central Asia and Mongolian pasture

Erdenejav Guriin Professor, Ph.D

Plant ecology Laboratory, Institute of Botany, Mongolian Academy of Sciences, Jukov street-77, Ulaanbaatar-51, Mongolia. E-mail: Erdenejav_er@yahoo.com

Key words : steppe, pasture, grassland, desert

Introduction Steppes are the most widespread type of plant communities in the Mongolian Republic, that is situated in the easternmost ultra continental sector of the Eurasian Steppe Region. The territories with the steppes vegetation extend from the western up to the eastern frontiers of the country (from 90° up to 120° E longitude), while in the south they reach 40°20' N latitude—that is much more south than in the neighbouring continental sector-Kazakhstan, where the boundary between steppe and desert region nearly coincides with 48° N latitude (Karamysheva, Lavrenko, Rachkovskaja, 1969).

Russian geobotanists traditionally distinguish the following steppe types, which successively replace one another from north to south with increasing aridity of climate, as demonstrated by decreasing precipitation, increase of temperature summations and lengthening of the frost-free period (Lavrenko, Karamysheva, Nikulina, 1991; Lavrenko, Karamyshf .va, 1993):

1. Meadow steppe, in semi humid climate.
2. True or typical steppes:
 - a) Bunch-grass steppe with many forbs, in semiarid climate.
 - b) Bunch-grass steppe with few forbs, in arid climate.
3. Desertified bunch-grass and dwarf semi-shrub-bunch-grass (semi-desert) steppe, in very arid climate.
4. Desert dwarf semi-shrub-bunch-grass steppe, in hyper arid climate.

Main zonal and altitudinal types of steppes The list of the main zonal and altitudinal types of steppes is made up on the basis of the legend to the vegetation map of MPR (Karamysheva, Dashnjam, 1990). The informatior by E. I. Rachkovskaja and E. A. Volkova is used for the territories of the Gobi Altai, the central and eastern parts of Mongolian Altai Mts.

The Latin names of plant communities are composed in the following order: Latin names of the dominants and codominants are transed in the first place. They are united by symbol "-". Further the groups of the so called "differential" species with the special ecology and (or) geography are adduced. The Central Asian subregion vegetation is classified in following blocks of Grasslands in Mongolian country.

Cryoxerophytic pasture in mountain:

- Forest pasture
- Steppe pasture
- Dry-Steppe pasture
- Desert-Steppe pasture
- Gobi-Deser pasture
- Pasture of floodlands

Nowadays 75 types of that 7 blocks are mainly preserve their natural conservation. The 9 province region of Northern China Grasslands are about 960 million hectares, 56% of these are used. This is so interesting for us. (According to Grasslands and Grassland sciences in Northern China, Washington, D.C 1992).